#### FORM 3

## STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING

AMENDED REPORT	
(highlight changes)	

DIV. OF OIL, GAS & MINING

							E MINEDAL LEAGENC	& CUDEACE
	AF	PPLICAT	ON FOR	PERMIT TO	DRILL		5. MINERAL LEASE NO: ML-11124	6. SURFACE: State
1A. TYPE OF WORK: DRILL Z REENTER DEEPEN						7. IF INDIAN, ALLOTTEE O	R TRIBE NAME:	
B. TYPE OF WE	LL: OIL 🗌 (	GAS 🗾 C	THER	SING	GLE ZONE MULTIPLE ZON	IE 🗾	8. UNIT or CA AGREEMEN	NAME:
2. NAME OF OPE	RATOR:		***				9. WELL NAME and NUMBE	ER:
The Housto	n Exploration	n Company					Hacking Reserve	
3. ADDRESS OF				TV 77	PHONE NUMBER:		10. FIELD AND POOL, OR	MLDCAT:
	iana, Suit 200	49 1 1 1	n <sub>STA</sub>	TE TX ZIP 776	002 (713) 830-6800		Undisignated	
	WELL (FOOTAGES)		101.0	147 Y	40.07 3545		11. QTR/QTR, SECTION, TO MERIDIAN:	OWNSHIP, RANGE,
AT SURFACE:	660' FSL & 1	1,980' FEL	440	17 C	-100 122021		SWSE 32 TE	3S 25E
AT PROPOSED	PRODUCING ZONE	same as	above 443	7480Y	40.073545			
14. DISTANCE IN	MILES AND DIRECT	ION FROM NEAR	EST TOWN OR PO	ST OFFICE:			12. COUNTY:	13. STATE:
43.4 mile	s south of Ve	rnal. UT					Uintah	UTAH
	NEAREST PROPER		NE (FEET)	16. NUMBER O	F ACRES IN LEASE:	17. NU	MBER OF ACRES ASSIGNE	 ED TO THIS WELL:
660'			(/		600			40
				40.0000000		00.00	ND DESCRIPTION:	
	O NEAREST WELL (DR) ON THIS LEASE (F		ETED, OR	19. PROPOSED				
1,900'					5,600		1155044	
21. ELEVATIONS	(SHOW WHETHER I	DF, RT, GR, ETC.)	:		ATE DATE WORK WILL START:	1	TIMATED DURATION:	
5,475' GF	<b>R</b>			1/15/200	06	30	Days ————————————————————————————————————	
24.			PROPOS	ED CASING A	ND CEMENTING PROGRAM			
SIZE OF HOLE	CASING SIZE, GR	RADE, AND WEIGH	IT PER FOOT	SETTING DEPTH	CEMENT TYPE, QU	IANTITY, Y	IELD, AND SLURRY WEIGI	⊣т
11"	9 5/8	J-55	36#	2,000	Premium Lite II	250	SKS 3.38 C	F 11.0 PPG
					CLASS "G"	329	SKS 1.2 C	F 15.6 PPG
					Calcium Chloride	200	SKS 1.10 C	F 15.6 PPG
7 7/8	4 1/2	N-80	11.6#	5,600	Premium Lite II	200	SKS 3.3 C	F 11.0 PPG
					CLASS "G"	400	SKS 1.56 C	F 14.3 PPG
25.	<u>L.</u>			ATTA	CHMENTS	-	CONEIL	TAITIAI
		OUED #1 4000D	ANDE MATULTUE				- UUNTIL	<del>JEN HAL-</del>
VERIFY THE FOL	LOWING ARE ATTA	CHED IN ACCORL	JANCE WITH THE C	JIAH OIL AND GAS C	ONSERVATION GENERAL RULES:			
<b>✓</b> WELL PL	AT OR MAP PREPAR	RED BY LICENSED	SURVEYOR OR E	NGINEER	COMPLETE DRILLING PLAN			
<b>✓</b> EVIDENO	E OF DIVISION OF V	MATER DIGHTS A	DDDOVAL EOD HS	E OE WATER	FORM 5, IF OPERATOR IS PE	ERSON OF	R COMPANY OTHER THAN	THE LEASE OWNER
EAIDENC	DE OF BIVISION OF V	WATERRIGHTOA	TROVALIONO	E OF WATER	Total s, in or Elevisor E			
	onur, William	A Rvan			TITLE Agent			
NAME (PLEASE	PRINT)	71119411	$\overline{}$				- 11-11-11	·
SIGNATURE	Wille	mas	Som	-	DATE 12-1-10			
(This space for Sta	te use only)	(	- 1	and the same	- American by the	- AZZAR	DEC	EIVED
		`	J		Approved by the Utah Division of		-	
	11.				Ou Con and Mining	a	חבר	0 9 2005
API NUMBER AS	SIGNED: 43	-047-3	7482		Oil Gas and Mining		DEC	0 0 2000

(11/2001)

#### THE HOUSTON EXPLORATION COMPANY T8S, R25E, S.L.B.&M. Well location, HACKING RESERVOIR #15-32-8-25, located as shown in the SW 1/4 SE 1/4 of 1935 Brass Cap Section 32, T8S, R25E, S.L.B.&M. Uintah County. 1935 Brass Cap 0.8' High S89\*58'22"E - 2634.92' (Meas.) S89\*58'21"E - 2634.15' (Meas.) 0.2' High Utah. BASIS OF ELEVATION 1935 Brass Cap 0.9' High SPOT ELEVATION LOCATED AT A TRAIL CROSSING IN THE SW 1/4 (Meas., CORNER OF SECTION 4, T9S, R25E, S.L.B.&M. TAKEN FROM THE WALSH KNOLLS, QUADRANGLE, UTAH, UINTAH COUNTY, 7.5 41' ( MINUTE QUAD. (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. 2642. SAID ELEVATION IS MARKED AS BEING 5607 FEET. BASIS OF BEARINGS BASIS OF BEARINGS IS A G.P.S. OBSERVATION. 3,, 14, 40.00N SOO O3'47"W 1935 Brass Cap 1935 Brass Cap 1.6' High 0.5' High. Pile of Stones (Meas. (Meas. 82, SCALE CERTIFICATE THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE HACKING RESERVOIR #15-32-8-25 BEST OF MY KNOWLEDGE AND BELIEF 1980' Elev. Ungraded Ground = 5476' REGISTERED LAND SURVEYOR REGISTRATION NO. 161319 W.C. 1935 Brass Cap 0.5' High, Pile STATE OF UTAH 1935 Brass Cap 0.5 1935 Brass Cap High, Set Stone 0.7' High T8STrue L N89°57'46"W - 2498.45' (Meas.) UINTAH ENGINEERING & LAND SURVEYING Position N89°56'41"W - 2641.01' (Meas.) T9S 85 SOUTH 200 EAST - VERNAL, UTAH 84078 -132.00' (G.L.O.) (435) 789-1017 (AUTONOMOUS NAD 83) LEGEND: LATITUDE = 40.04'24.84'' (40.073567) SCALE DATE SURVEYED: DATE DRAWN: LONGITUDE = 109'07'21.73" (109.122703) 1" = 1000'= 90° SYMBOL 10-28-05 11-14-05 PARTY (AUTONOMOUS NAD 27) REFERENCES = PROPOSED WELL HEAD. LATITUDE = 40.04'24.96" (40.073600) N.H. D.S. E.C.O. G.L.O. PLAT = SECTION CORNERS LOCATED. LONGITUDE = $109^{\circ}07'19.31"$ (109.122031) WEATHER = TRUE POSITION. COOL THE HOUSTON EXPLORATION COMPANY

#### Ten Point Plan

#### The Houston Exploration Company

#### Hacking Reservoir 15-32-8-25

Surface Location SW 1/4 SE 1/4, Section 32, T. 8S., R. 25E.

#### 1. Surface Formation

Green River

#### 2. Estimated Formation Tops and Datum:

<u>Formation</u>	Depth	Datum
Green River	Surface	+5,475° G.L.
Uteland Butte Limestone	3,746	+1,729'
Wasatch	3,880	+1,595'
Mesaverda	5,547	-72'
TD	5600'	-1,025'

A 11" hole will be drilled to 2,000' +/-. The hole depth will depend on the depth that the Birds Nest Zone is encountered. The hole will be drilled 400' beyond the top of the Birds Nest.

#### 3. Producing Formation Depth:

Formation objective includes the Green River, Wasatch, Mesaverde and its submembers.

Off Set Well information:

Proposed Well:

Hacking Reservoir #11-32-8-25 Hacking Reservoir #9-32-8-25 Hacking Reservoir #7-32-8-25 Hacking Reservoir #5-32-8-25 Hacking Reservoir #3-32-8-25

Shut in Well:

C.S. #32-2

Abandoned Well:

C.B. #33-5

#### 4. Proposed Casing:

Hole	Casing			Setting	Casing	
<u>Size</u>	<u>Size</u>	Weight/FT	<u>Grade</u>	<u>&amp; Tread</u>	<u>Depth</u>	New/Used
11	9 5/8	36#	J-55	STC	2000	NEW
7 7/8	4 1/2	11.6#	N-80	LTC	T.D.	NEW

#### **Cement Program:**

#### The Surface Casing will be cemented to the Surface as follows:

Lead:	Casing <u>Size</u>	Cement Type	Cement Amounts	Cement <u>Yield</u>	Cement Weight
Lead:	9 5/8	Premium Lite II .05#/sk Static Free .25#/sk Cello Flake 5#/sk KOL Seal .002 gps FP-6L 10% Bentonite .5% Sodium Metasili 3% Potassium Chlori		3.38ft³/sk	11.0 ppg
Tail:					
	9 5/8	Class "G" 2% Calcium Chlorid .25#/sk Cello Flake	329 sks. +/-	1.2ft³/sk	15.6 ppg
Top Jo	b:				
	9 5/8	4% Calcium Chloride .25#/sk Cello Flake	200 sks. +/	′-1.10ft³/sk	15.6 ppg

#### Production casing will be cemented to 2,500' or higher as follows:

	Casing	Cement	Cement	Cement	Cement
	<u>Size</u>	<u>Type</u>	Amounts	<u>Yield</u>	<u>Weight</u>
Lead:					
	4 1/2	Premium Lite II .25#/sk Cello Flake .05#/sk Static Free 5#/sk Kol Seal 3% Potassium Chlor .055 gps FP-6L 10% Bentonite .5 Sodium Metasilica	ide	3.3ft³/sk	11.0 ppg
Tail:					
	4 1/2	Class "G" .05% Static Free 2 Sodium Chloride .1% R-3	400 sks +/-	1.56ft³/sk	14.3 ppg

#### 5. BOP and Pressure Containment Data:

2% Bentonite

The anticipated bottom hole pressure will be less than 3000 psi.

A 3000-psi WP BOP system as described in the BOP and Pressure Containment Data (attached) will be installed and maintained from the 9 5/8" surface casing. The BOP system including the casing will be pressure tested to minimum standards set forth in "On Shore Order #2". The BOP will be mechanically checked daily during the drilling operation.

#### 6. Mud Program:

Interval	Mud weight lbs./gal.	Viscosity Sec./OT.	Fluid Loss MI/30 Mins.	Mud Type
0-2000 2000-T.D.	Air/Clear Water 8.4-12.0	30	No Control 8-10	Water/Gel Water/Gel

#### 7. Auxiliary Equipment

Upper Kelly cock, full opening stabbing valve, 2 ½" choke manifold and pit level indicator.

#### 8. Testing, Coring, Sampling and Logging:

a) Test: None are anticipated.

b) Coring: There is the possibility of sidewall coring.

c) Sampling: Every 10' from 2000' to T.D.

d) Logging: Type Interval

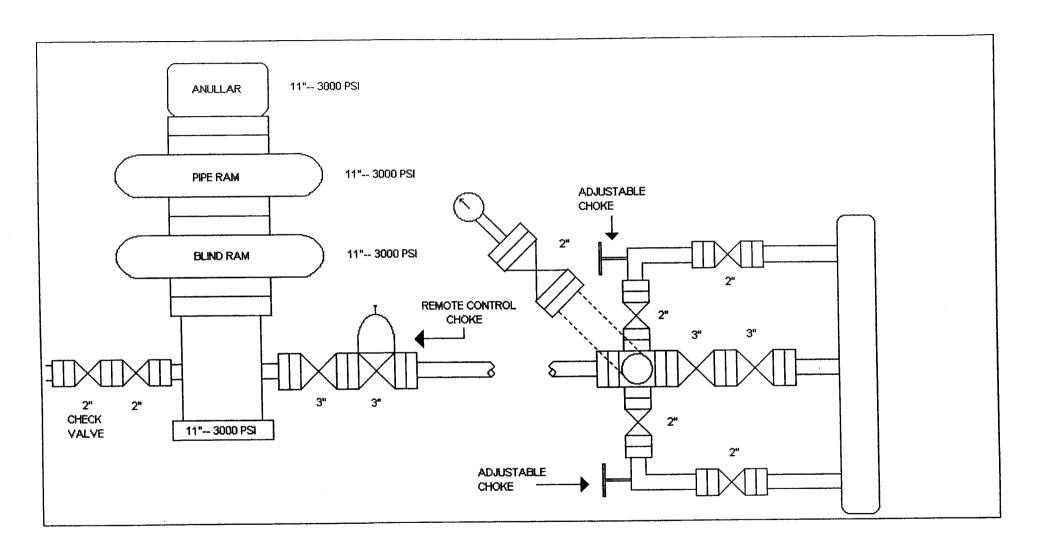
DLL/SFL W/GR and SP T.D. to Surf. Csg FDC/CNL W/GR and CAL T.D. to Surf. Csg

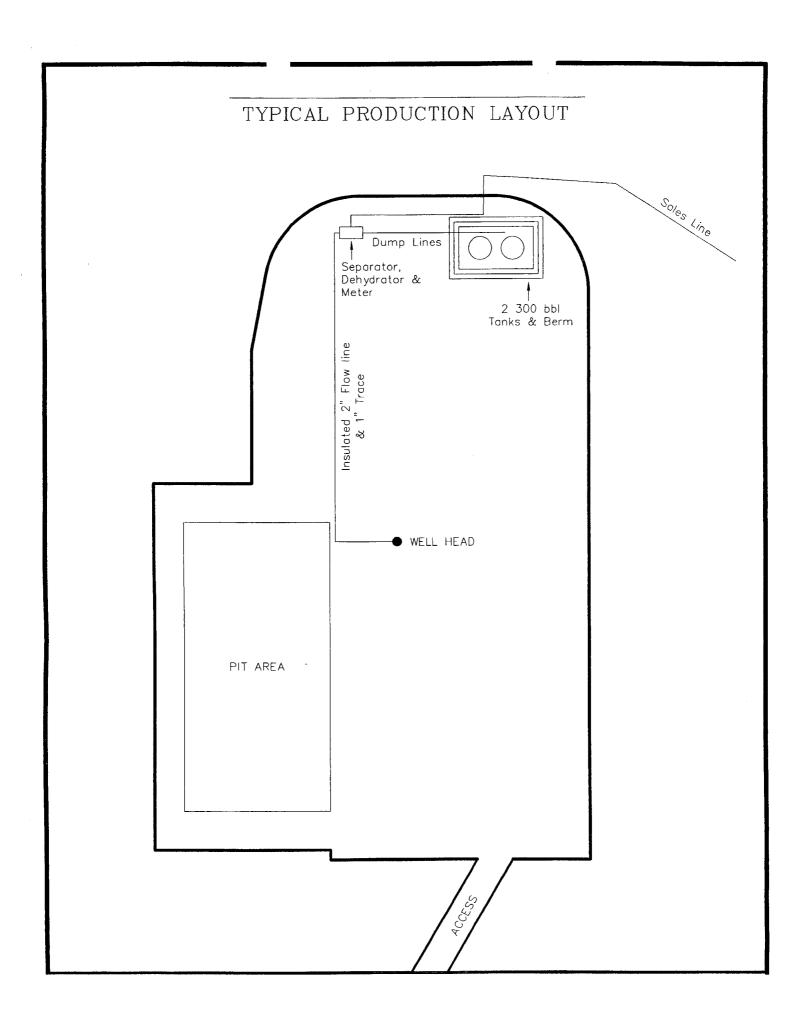
#### 9. Abnormalities (including sour gas):

No abnormal pressures, temperatures or other hazards are anticipated. Oil and gas shows are anticipated in the Wasatch Formation. Other wells drilled in the area have not encountered over pressured zones or H2S.

#### 10. Drilling Schedule:

The anticipated starting date is <u>01/15/2006</u> Duration of operations is expected to be 30 days.





# THE HOUSTON EXPLORATION COMPANY 13 POINT SURFACE USE PLAN

**FOR WELL** 

**HACKING RESERVOIR 15-32-8-25** 

LOCATED IN SW 1/4 SE 1/4

**SECTION 32, T.8S, R25E, S.L.B.&M.** 

**UINTAH COUNTY, UTAH** 

**LEASE NUMBER: ML-11124** 

**SURFACE OWNERSHIP: STATE** 

#### 1. Existing Roads:

To reach The Houston Exploration Co. well Hacking Reservoir 15-32-8-25 in Section 32, T8S, R 25E, starting in Vernal, Utah:

Proceed in an easterly, then southerly, then southeasterly direction from Vernal, UT along US Highway 40 approximately 25.0 miles to the junction of this road and an existing road to the south; turn right and proceed in a southerly, then southeasterly, then southwesterly direction approximately 13.7 miles to the junction of this road and an existing road to the southeast; turn left and proceed in a southwesterly, then northeasterly, then southeasterly, then southwesterly direction approximately 3.4 miles to the beginning of the proposed access to the southwest; follow road flags in a southwesterly, then southeasterly, then northwesterly direction approximately 1.3 miles to the proposed location.

## Total distance from Vernal, Utah to the proposed well location is approximately 43.4 miles.

All existing roads to the proposed location are State of Utah, BLM maintained or County Class D roads. Please see the attached map for additional details.

#### 2. Planned access road

The proposed access road will be approximately 6,264' +/- of new construction on lease and

approximately 1,656' of new construction off leasee and approximately 3.2 miles of existing two-track needs upgraded off lease. The road will be graded once per year minimum and maintained.

A) Annuavimata langth	7920 ft		
A) Approximate length			
B) Right of Way width	30 ft		
C) Running surface	18 ft		
D) Surface material	Native soil		
E) Maximum grade	5%		
F) Fence crossing	None		
G) Culvert	None		
H) Turnouts	None		
I) Major cuts and fills	None		
J) Road Flagged	Yes		
K) Access road surface	ownership		
State & Federal			
L) All new construction	n on lease		

Please see the attached location plat

M) Pipe line crossing

for additional details.

## An off lease right-of-way will be required.

All surface disturbances for the road and location will be within the lease boundary.

- 3. Location of existing wells

  The following wells are located within
  a one-mile radius of the location site.
  - A) Producing well

B) Water well None

C) Abandoned well C.B. #33-5

D) Temp. abandoned well None
E) Disposal well None

F) Drilling /Permitted well

No

None

Hacking Reservoir 11-32-8-25 Hacking Reservoir 9-32-8-25 Hacking Reservoir 7-32-8-25 Hacking Reservoir 5-32-8-25 Hacking Reservoir 3-32-8-25

- G) Shut in wells C.S. 32-2
- H) Injection well None
- I) Monitoring or observation well None

Please see the attached map for additional details.

4. Location of tank batteries, production facilities and production gathering service lines.

All production facilities are to be contained within the proposed location site. Please see the attached plat plan for a typical gas well separator installation and well site piping.

All permanent (on site for more than six months or longer) structures constructed or installed will be painted an **Carlsbad Canyon** color. Facilities required to comply with O.S.H.A. (Occupational Safety and Health Act) will be excluded. The required paint color is **Carlsbad Canyon**.

All tanks will be surrounded by a dike of sufficient capacity to contain the storage capacity of the largest tank in the battery. The integrity of the dike will be maintained.

All off lease storage, off lease measurement, commingling on lease or off lease, of production, will have prior written approval form the authorized officer.
If the well is capable of economic production a surface gas line will be required.

Approximately 10,680' +/- of 3" steel surface gas gathering line would be constructed on State and Federal Lands. The line will tie into the proposed Questar pipeline in Section 30, T8S, R25E. The pipeline would be strung and boomed to the northwest of the location. The pipeline may be buried as determined by the Authorized Officer at the onsite.

An off lease right-of-way will be required for approximately 3,850.

Please see the attached location diagrams for pipeline location.

The gas meter run will be located within 500' of the wellhead. The gas line will be buried or anchored down from the wellhead to the meter.

Meter runs will be housed and/or fenced.

The gas meter will be calibrated and the tank strapped in place prior to any deliveries. Tests for meter accuracy will be conducted monthly for the first three months on new meter installations and at least quarterly thereafter. The authorized officer will be provided with a date and time for the initial meter calibration and all future meter-proving schedules. A copy of the meter calibration report will be submitted to the BLM's Vernal District office and State of Utah, Division of Oil, Gas, and Mining.

All measurement facilities will conform to API (American Petroleum Institute) and AGA (American Gas Association) standards for gas and liquid hydrocarbon measurement.

#### 5. Location and type of water supply

Water for drilling and cementing will come from The White River in Permit #T-76073.

#### 6. Source of construction materials

All construction material for this location site and access road shall be borrow material accumulated during construction of the location site and access road. Additional road gravel or pit lining material will be obtained from private resources.

#### 7. Methods for handling waste disposal

#### A) Pit construction and liners:

The reserve pit will be approximately 12 ft. deep and most of the depth shall be below the surface of the existing ground Please see the attached plat for details.

The reserve pit will be lined.

The reserve pit will be used to store water for drilling. A semi-closed system will be used to drill the well. All fresh water for drilling will come from a frac tank placed on location and from the rig tank. The pit will be used to hold non-flammable materials such as cuttings, salt, drilling

fluids, chemicals, produced fluids, etc.

#### B) Produced fluids:

Produced water will be confined to the reserve pit, or if deemed necessary, a storage tank for a period not to exceed 90 days after initial production. During the 90-day period an application for approval for permanent disposal method and location will be submitted to the authorized officer. Evaporation may be used instead of trucking to facilitate closing and reclamation of the reserve pit. A pumping system would be used for evaporation.

#### C) Garbage:

A trash cage fabricated from expanded metal will be used to hold trash on location and will be removed to an authorized landfill location.

#### D) Sewage:

A portable chemical toilet will be supplied for human waste.

#### E) Site clean-up:

After the rig is moved off the location the well site area will be cleaned and all refuse removed.

#### 8. Ancillary facilities

There are no ancillary facilities planned at this time and none are foreseen for the future.

#### 9. Well-site layout

Location dimensions are as follows:

A) Pad length	345 ft.
B) Pad width	245 ft.
C) Pit depth	12 ft.
D) Pit length	150 ft.
E) Pit width	75 ft.
F) Max cut	22.0 ft.
G) Max fill	9.6 ft.
H) Total cut yds.	11,560 cu yds
I) Pit location	South end
J) Top soil location	South end
	•

K) Access road location

East end corner C

L) Flare Pit

Please see the attached location diagram for additional details.

All pits will be fenced according to the following minimum standards:

- A) Thirty nine inch net wire shall be used with at least one strand of wire on top of the net wire. Barbed wire is not necessary if pipe or some type of reinforcement rod is attached to the top of the entire fence.
- B) The net wire shall be no more than 2 inches above the ground. The barbed wire shall be 3 inches above the net wire. Total height of the fence shall be at leas 42 inches.
- C) Corner posts shall be cemented and/or braced in such a manner to keep the fence tight at all times.

- D) Standard steel, wood or pipe posts shall be used between the corner braces. Maximum distance between any two posts shall be no greater than 16 ft.
- E) All wire shall be stretched by using a stretching device before it is attached to the corner posts.

#### 10. Plans for restoration of the surface

Prior to construction of the location, the top 6 inches of soil material will be stripped off the location and the pit area. The topsoil removed and piled will amount to approximately 1,760 cubic yards of material. Topsoil will be stockpiled in one distinct pile. Placement of the topsoil is noted on the attached location plat. The topsoil pile from the location will be seeded as soon as the soil is stock piled with the seed mix listed. When all drilling and completion activities have been completed and the pit back-filled the topsoil from the pit area will be spread on the pit area. The pit area will be seeded when the soil has been spread. The unused portion of the location (the area outside the dead men) will be re-contoured.

The dirt contractor will be provided with an approved copy of the surface use plan prior to construction activities.

Changes to the drainage during the construction activities shall be restored to its original line of flow

or as near as possible when the pit is back-filled

All disturbed areas will be recontoured to the approximate natural contours. Prior to back filling the pit the fences around the reserve pit will be removed.

The reserve pit will be reclaimed within 90 days of well completion. If the reserve pit has not dried sufficiently to allow back filling, an extension on the time requirement for back filling the pit will be requested. Once reclamation activities have begun, they shall be completed within 30 days.

After the reserve pit has been reclaimed, no depressions in the soil covering the reserve pit will be allowed. The objective is to keep seasonal rainfall and run off from seeping into the soil used to cover the reserve pit. Diversion ditches and water bars will be used to divert the run off as needed.

When restoration activities have been completed, the location site and new access road cuts and shoulders shall be reseeded. Prior to reseeding, all disturbed areas will be scarified and left with a rough surface.

#### A) Seeding dates:

Seed will be spread when topsoil is stock piled and when reclamation work is performed.

The seed mix and quantity list will be used whether the seed is broadcast or drilled.

#### B) Seed Mix

To be determined by the Authorized Officer.

#### 11. Surface ownership:

Access road State & Federal Location State Pipe line State & Federal

#### 12. Other information:

#### A) Vegetation

The vegetation coverage is Slight. The majority of the existing vegetation consists of non-native species. Rabbit brush, bitter brush, and Indian Rice grass and Sagebrush are also found on the location.

#### B) Dwellings:

There are no dwelling or other facilities within a one-mile radius of the location.

#### C) Archeology:

The location has been surveyed. A copy of that survey will be forwarded to your office.

If, during operations, any archaeological or historical sites, or any objects of antiquity (subject to the antiquities act of June 8, 1906) are discovered, all operations, which would affect

such sites, will be suspended and the discovery reported promptly to the surface management agency.

#### D) Water:

The nearest water is the Hacking Reservoir located approximately 2.5 miles to the North.

#### E) Chemicals:

No pesticides, herbicides or other possible hazardous chemicals will be used without prior application.

#### F) Notification:

- a) Location Construction At least forty eight (48) hours prior to construction of location and access roads.
- b) Location completion Prior to moving on the drilling rig.
- c) Spud notice At least twenty-four (24) hours prior to spudding the well.
- d) Casing string and cementing
  At least twenty-four (24) hours prior to running casing and cementing all casing strings.
- e) BOP and related equipment tests At least twenty-four (24) hours prior to initial pressure tests.
- f) First production notice

Within five (5) business days after the new well begins, or production resumes after well has been off production for more than 90 days.

#### G) Flare pit:

The flare pit will be located in **corner C** of the reserve pit out side the pit fences and 100 feet from the bore hole on the east side of the location. All fluids will be removed from the pit within 48 hours of occurrence.

## 13. Lessees or Operator's representative and certification

#### A) Representative

William A. Ryan Rocky Mountain Consulting 290 S 800 E Vernal, UT 84078

Office 435-789-0968 Fax 435-789-0970 Cellular 435-828-0968

All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, onshore oil and gas orders, and any applicable notices to lessees. The operator is fully responsible for the actions of his subcontractors. A copy of these conditions will be furnished to the field representative to ensure compliance.

This drilling permit will be valid for a period of one year from the date of approval. After permit termination, a new application will be filed for approval for any future operations.

#### B) Certification:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill-site and access route that I am familiar with the conditions which presently exist, that the statements made in this plan are, to the best of my knowledge and belief, true and correct, and that the work associated with the operation proposed herein will be preformed by The Houston **Exploration Company and its** contractors and subcontractors in conformity with this plan and terms and conditions with this plan and the terms and conditions under which it is approved.

Date 11.16

William A. Ryan, Agent

Rocky Mountain Consulting

**Onsite Dates:** 

#### Statement of use of Hazardous Materials

No chemical(s) from the EPA's consolidated list of Chemicals subject to Reporting under Title III of the Superfund Amendments and Reauthorization, Act (SARA) of 1986 will be used, produced, transported, stored, disposed, or associated with the proposed action. No extremely hazardous substances, as defined in 40 cfr 355, will be used, produced, stored, transported, disposed, or associated with the proposed action.

If you require additional information please contact:

William A Ryan Agent for The Houston Exploration Company Rocky Mountain Consulting 290 S 800 E Vernal, UT 84078

435-789-0968 Office 435-828-0968 Cell 435-789-0970 Fax

### THE HOUSTON EXPLORATION COMPANY

HACKING RESERVOIR #15-32-8-25

LOCATED IN UINTAH COUNTY, UTAH SECTION 32, T8S, R25E, S.L.B.&M.



PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKE

**CAMERA ANGLE: NORTHWESTERLY** 

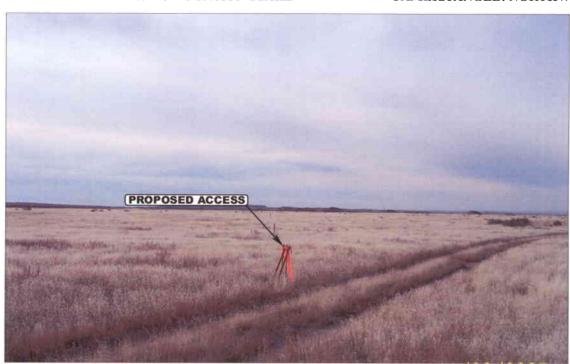
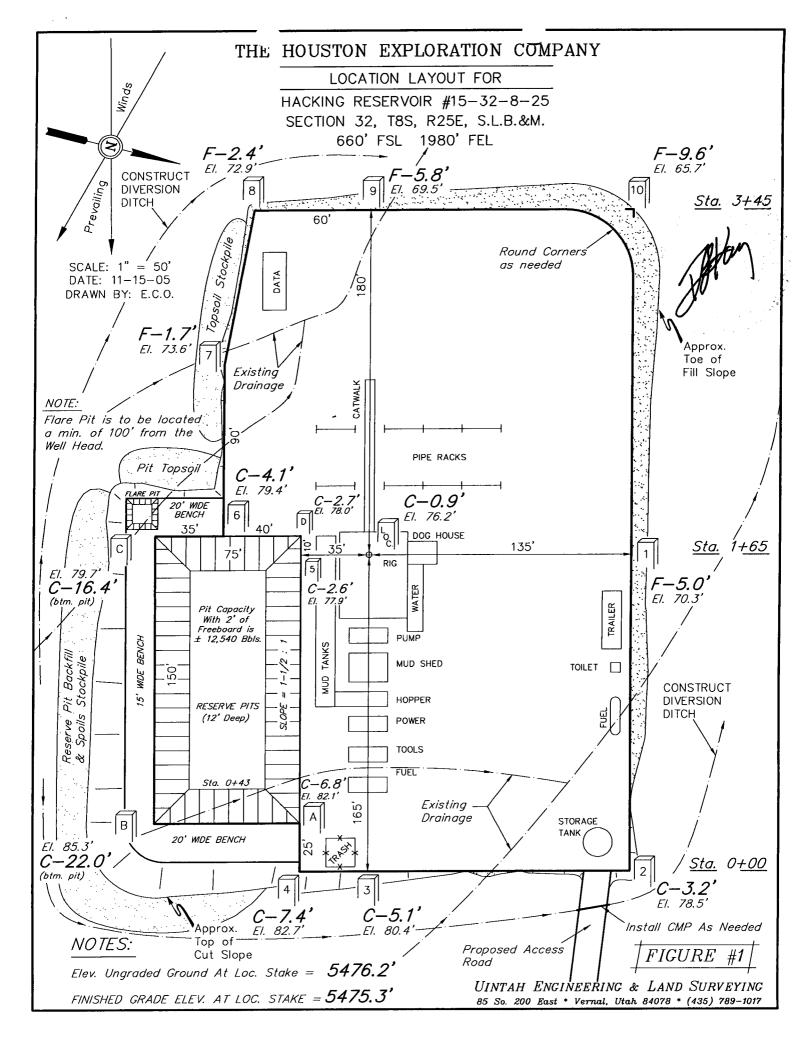


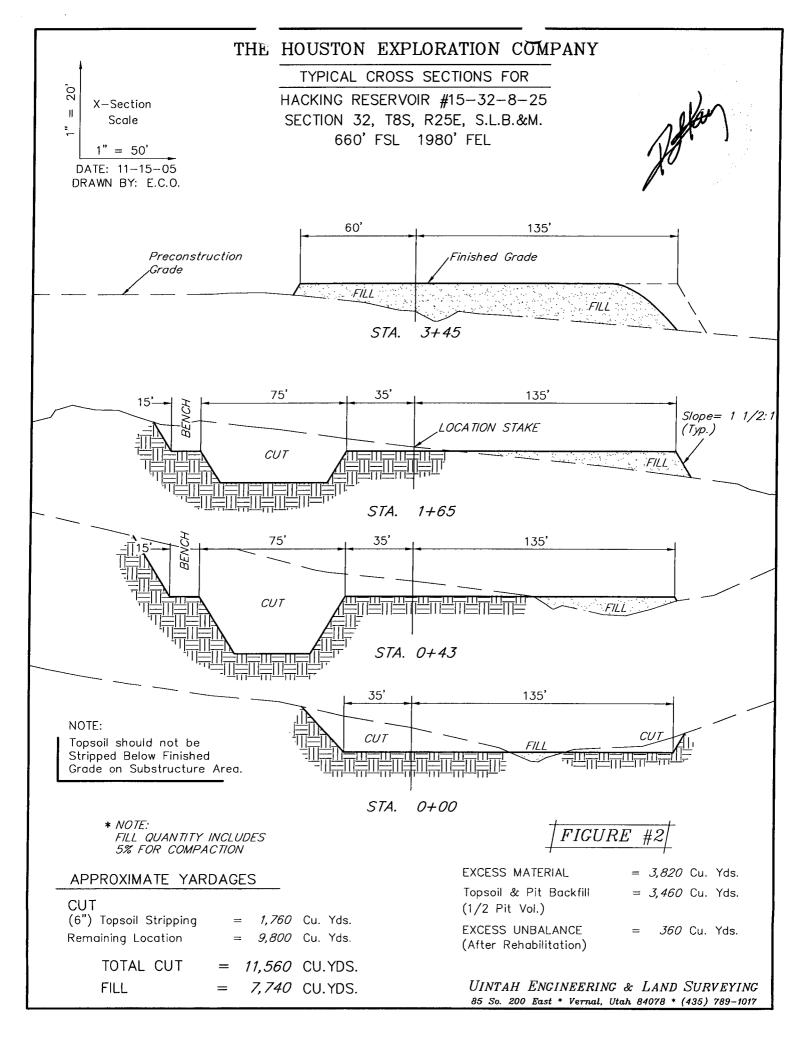
PHOTO: VIEW FROM BEGINNING OF PROPOSED ACCESS

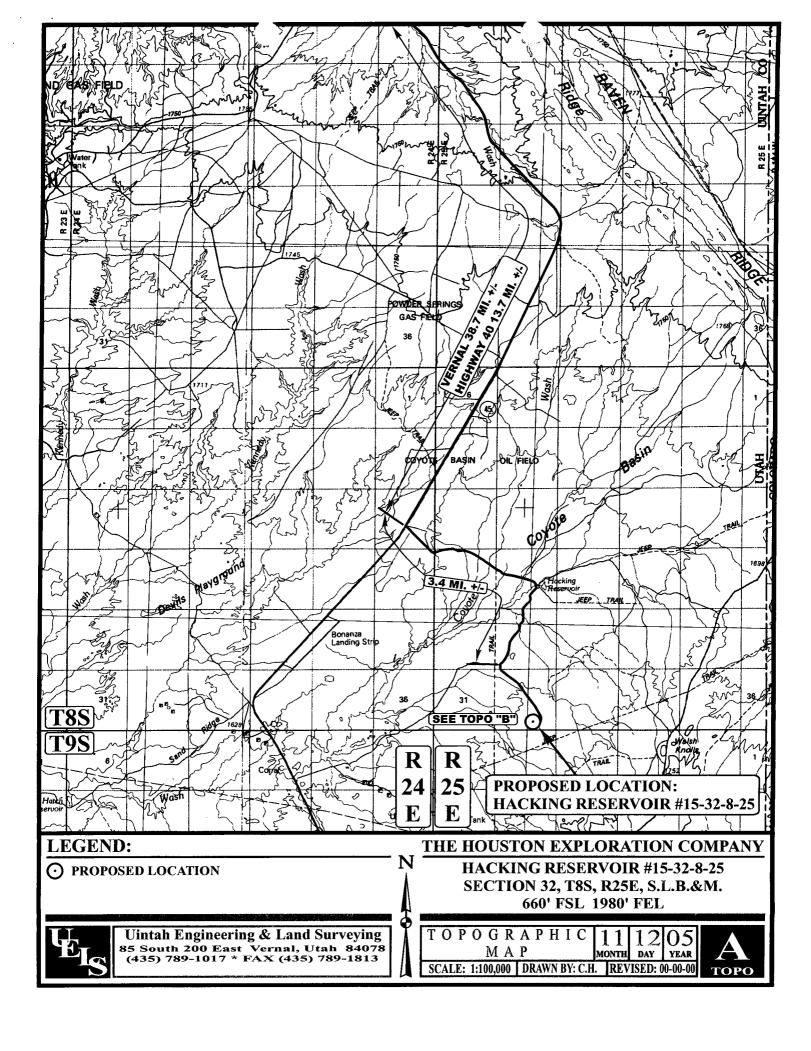
**CAMERA ANGLE: SOUTHERLY** 

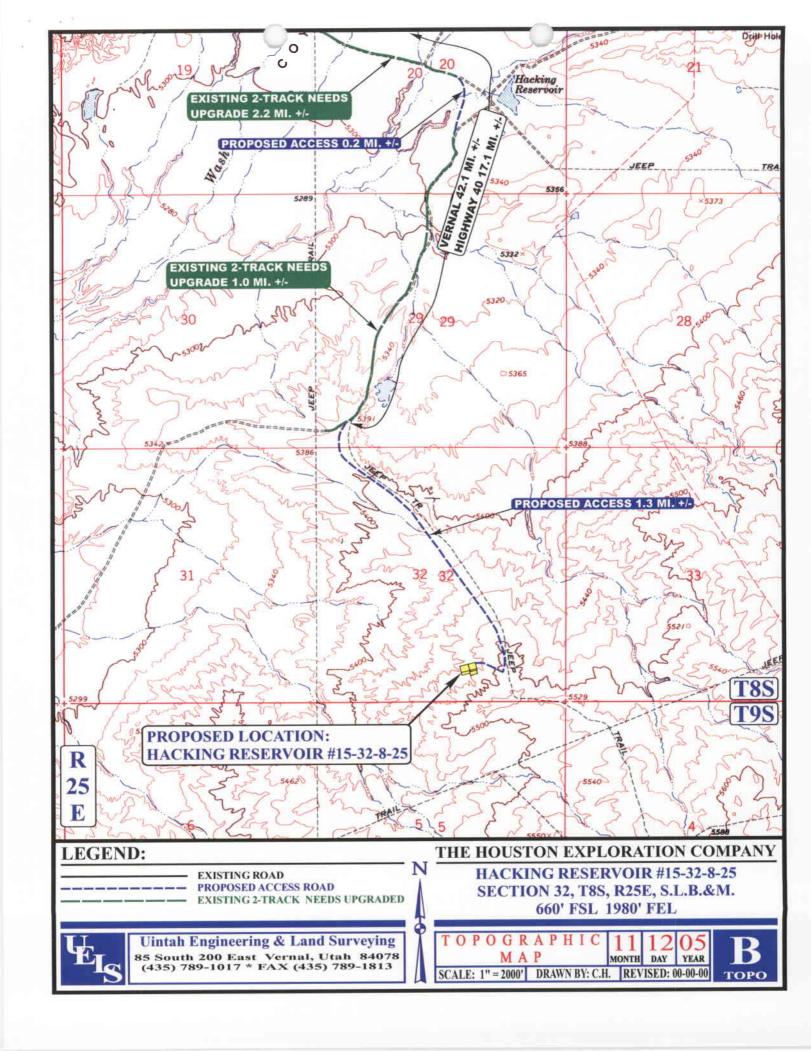


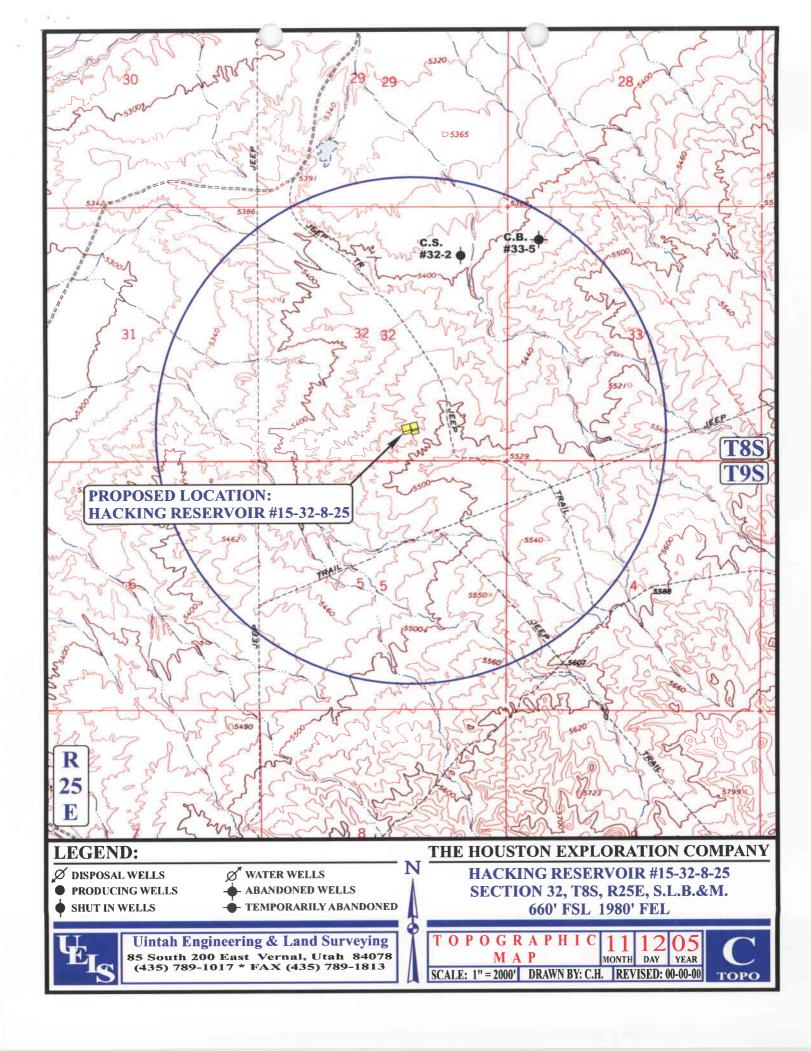


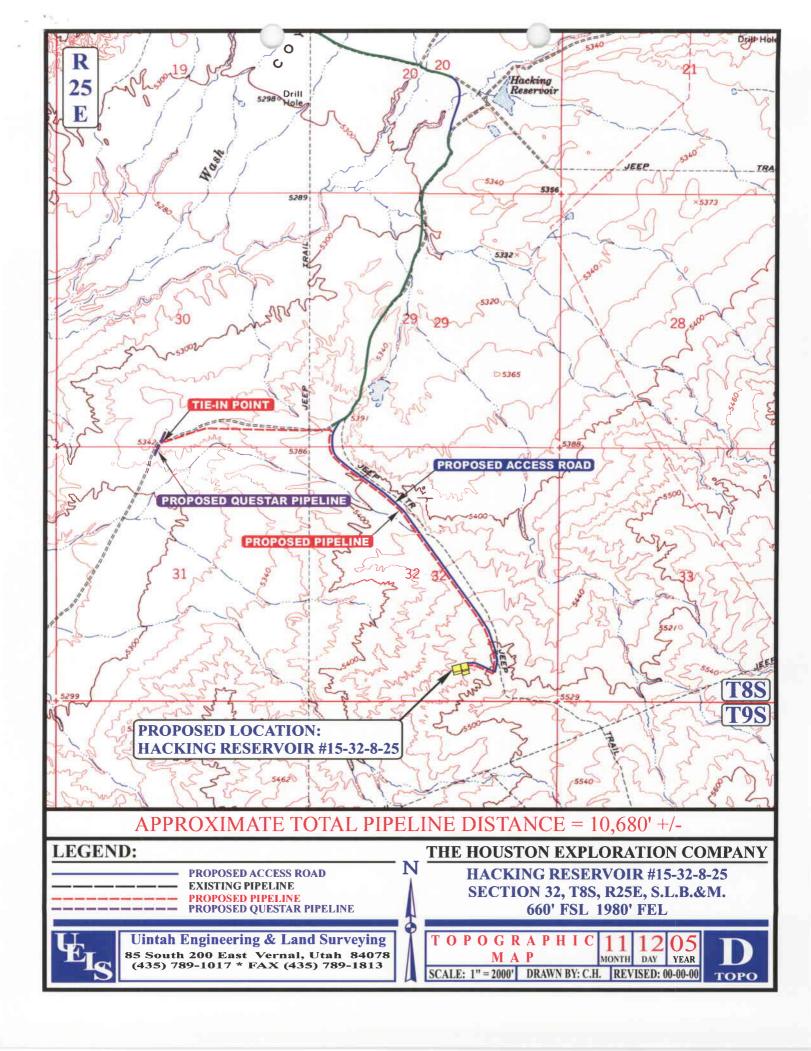












## STATE OF UTAH

FORM 3 **DEPARTMENT OF NATURAL RESOURCES** DIVISION OF OIL. GAS AND MINING AMENDED REPORT (highlight changes) 5. MINERAL LEASE NO: 6. SURFACE: APPLICATION FOR PERMIT TO DRILL ML-11124 State 7. IF INDIAN, ALLOTTEE OR TRIBE NAME: DRILL 🗸 REENTER [ DEEPEN | 1A. TYPE OF WORK: 8. UNIT or CA AGREEMENT NAME: OIL GAS 🗸 SINGLE ZONE MULTIPLE ZONE B. TYPE OF WELL: OTHER 2. NAME OF OPERATOR: 9. WELL NAME and NUMBER: The Houston Exploration Company Hacking Reservoir 15-32-8-25 3. ADDRESS OF OPERATOR: PHONE NUMBER: 10. FIELD AND POOL, OR WILDCAT: 1100 Louisiana, Suit 200 CITY Houston STATE TX 21P 77002 (713) 830-6800 Undisignated 4. LOCATION OF WELL (FOOTAGES) 40.07 3545 11. QTR/QTR, SECTION, TOWNSHIP, RANGE, 660140X MERIDIAN AT SURFACE: 660' FSL & 1,980' FEL AT PROPOSED PRODUCING ZONE: same as above SWSE 32 -109.122026 T8S 25E 14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE: 12. COUNTY: 13. STATE UTAH 43.4 miles south of Vernal, UT Uintah 15. DISTANCE TO NEAREST PROPERTY OR LEASE LINE (FEET) 16. NUMBER OF ACRES IN LEASE 17. NUMBER OF ACRES ASSIGNED TO THIS WELL: 660 600 40 18. DISTANCE TO NEAREST WELL (DRILLING, COMPLETED, OR 19. PROPOSED DEPTH 20. BOND DESCRIPTION: APPLIED FOR) ON THIS LEASE (FEET) 1,900' 5.600 104155044 21. ELEVATIONS (SHOW WHETHER DF, RT, GR, ETC.): 22. APPROXIMATE DATE WORK WILL START: 23. ESTIMATED DURATION: 5.475' GR 1/15/2006 30 Days PROPOSED CASING AND CEMENTING PROGRAM 24. SIZE OF HOLE CASING SIZE, GRADE, AND WEIGHT PER FOOT SETTING DEPTH CEMENT TYPE, QUANTITY, YIELD, AND SLURRY WEIGHT 11" 9 5/8 J-55 36# 2.000 Premium Lite II 250 SKS 3.38 CF 11.0 PPG CLASS "G" 329 SKS 1.2 CF 15.6 PPG Calcium Chloride 200 SKS 1.10 CF 15.6 PPG 7 7/8 4 1/2 N-80 11.6# 5.600 Premium Lite II 200 SKS 3.3 CF 11.0 PPG CLASS "G" 400 SKS 1.56 CF 14.3 PPG 25. **ATTACHMENTS** VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER COMPLETE DRILLING PLAN EVIDENCE OF DIVISION OF WATER RIGHTS APPROVAL FOR USE OF WATER FORM 5, IF OPERATOR IS PERSON OR COMPANY OTHER THAN THE LEASE OWNER William A Ryan Agent NAME (PLEASE PRINT)

SIGNATURE

(This space for State use only)

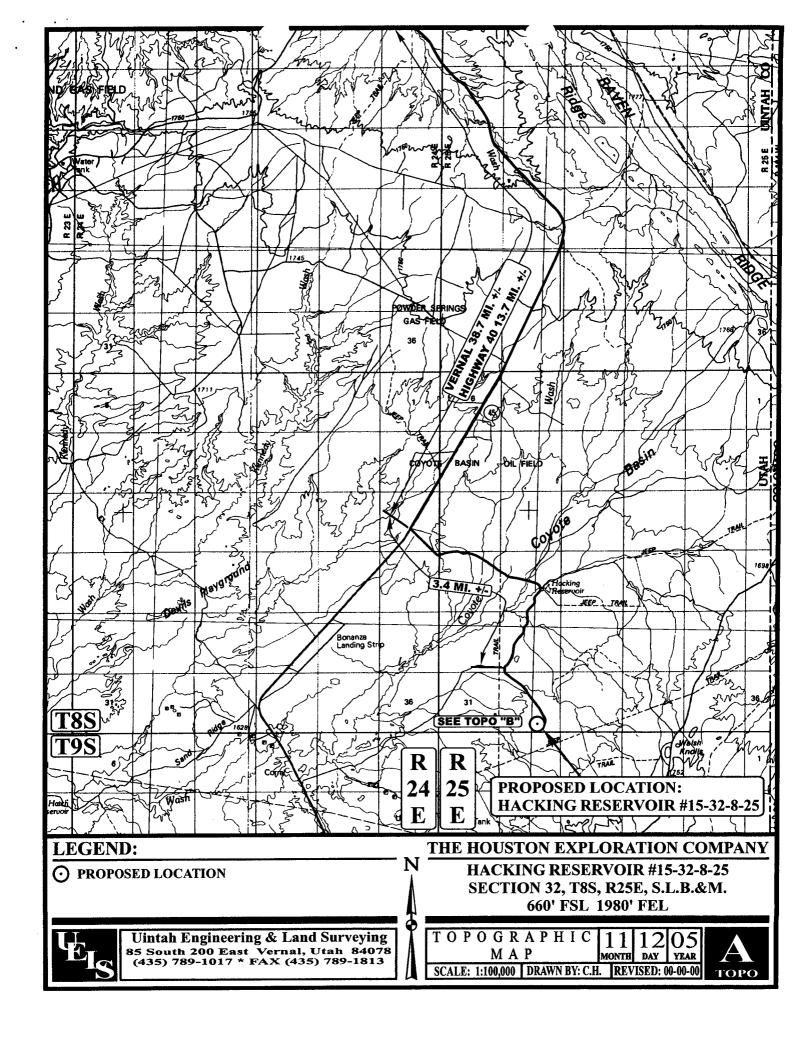
RECEIVED DEC 0 9 2005

43-047-37482

APPROVAL:

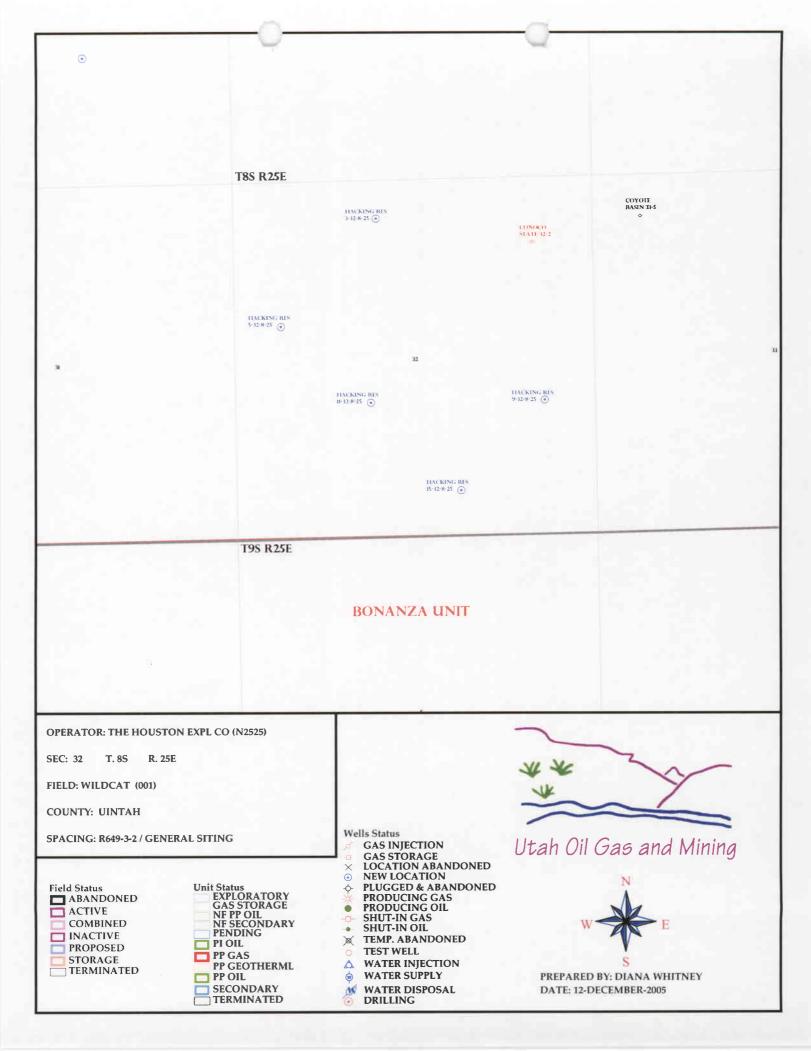
DIV. OF OIL, GAS & MINING

#### THE HOUSTON EXPLORATION COMPANY T8S, R25E, S.L.B.&M. Well location, HACKING RESERVOIR #15-32-8-25, located as shown in the SW 1/4 SE 1/4 of 1935 Brass Cap Section 32, T8S, R25E, S.L.B.&M. Uintah County, 1935 Brass Cap 0.8' High S89'58'22"E - 2634.92' (Meas.) 0.2' High S89'58'21"E - 2634.15' (Meas.) Utah BASIS OF ELEVATION 1935 Brass Cap 0.9' High SPOT ELEVATION LOCATED AT A TRAIL CROSSING IN THE SW 1/4 CORNER OF SECTION 4, T9S, R25E, S.L.B.&M. TAKEN FROM THE WALSH KNOLLS, QUADRANGLE, UTAH, UINTAH COUNTY, 7.5 MINUTE QUAD. (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED 41, STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. ,61 SAID ELEVATION IS MARKED AS BEING 5607 FFFT. 2642. BASIS OF BEARINGS BASIS OF BEARINGS IS A G.P.S. OBSERVATION. VOO'04'47"E 500.03,47 1935 Brass Cap 1935 Brass Cap 1.6' High 0.5' High, Pile of Stones (Meas., SCALE CERTIFICATE THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO BEST OF MY KNOWLEDGE AND BEGGE HACKING RESERVOIR #15-32-8-25 90.000 1980' Elev. Ungraded Ground = 5476' 50.003 REGISTERED LAND SURVEYOR REGISTRATION NO. 461319 W.C. 1935 Brass STATE OF WITH Cap 0.5' High, Pile 1935 Brass Cap 0.5" 1935 Brass Cap of Stones High, Set Stone 0.7' High **T8S** True UINTAH ENGINEERING & LAND SURVEYING N89°57'46"W - 2498.45' (Meas.) Position N89°56'41"W - 2641.01' (Meas.) **T9S** 85 SOUTH 200 EAST - VERNAL, UTAH 84078 -132.00' (G.L.O.) (435) 789-1017 (AUTONOMOUS NAD 83) LEGEND: SCALE LATITUDE = $40^{\circ}04'24.84''$ (40.073567) DATE SURVEYED: DATE DRAWN: 1" = 1000'LONGITUDE = $109^{\circ}07'21.73''$ (109.122703) 10-28-05 11-14-05 = 90° SYMBOL PARTY REFERENCES (AUTONOMOUS NAD 27) PROPOSED WELL HEAD. LATITUDE = $40^{\circ}04'24.96"$ (40.073600) N.H. D.S. E.C.O. G.L.O. PLAT = SECTION CORNERS LOCATED. LONGITUDE = 109'07'19.31" (109.122031) WEATHER FILE = TRUE POSITION. COOL THE HOUSTON EXPLORATION COMPANY



## WORKSHEET APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 12/09/2005	API NO. ASSIGNED: 43-047-37482
WELL NAME: HACKING RES 15-32-8-25  OPERATOR: HOUSTON EXPLORATION CO, ( N2525 )  CONTACT: BILL RYAN  PROPOSED LOCATION:  SWSE 32 080S 250E  SURFACE: 0660 FSL 1980 FEL  BOTTOM: 0660 FSL 1980 FEL  UINTAH  WILDCAT ( 1 )  LEASE TYPE: 3 - State  LEASE NUMBER: ML-11124  SURFACE OWNER: 3 - State  PROPOSED FORMATION: MVRD	PHONE NUMBER: 435-781-0968  INSPECT LOCATN BY: / /  Tech Review Initials Date  Engineering Own (/u/Ob  Geology  Surface LATITUDE: 40.07355
COALBED METHANE WELL? NO	LONGITUDE: -109.1220
Plat  Bond: Fed[] Ind[] Sta[] Fee[]  (No. 104155044 )  Potash (Y/N)  Oil Shale 190-5 (B) or 190-3 or 190-13  Water Permit  (No. T-76073 )  RDCC Review (Y/N)  (Date: 12/27/2005 )  NAP Fee Surf Agreement (Y/N)  ALA Intent to Commingle (Y/N)	LOCATION AND SITING:  R649-2-3.  Unit  R649-3-2. General
STIPULATIONS: 1- Space Sip	9-05) = BASIS



#### DIVISION OF OIL, GAS AND MINING APPLICATION FOR PERMIT TO DRILL STATEMENT OF BASIS

OPERATOR:	THE HOUSTON EXPLORATION COMPANY
WELL NAME & NUMBER:	HACKING RESERVOIR 15-32-8-25
API NUMBER:	43-047-37482
<b>LOCATION:</b> 1/4,1/4 <u>SWSE</u> Sec: <u>3</u>	<u>32</u> TWP: <u>8S</u> RNG: <u>25E</u> <u>660'</u> FSL <u>1980'</u> FEL
Geology/Ground Water:	
The Houston Ex. Co. proposes to se	et 2000 feet of surface casing cemented to the surface. The base of the
moderately saline water is estimated	d at 3,500 feet. A search of Division of Water Rights records shows no
water wells within a 10,000 foot rac	dius of the center of Section 32. The surface formation at this location is the
Uinta Formation. The Uinta Forma	ation is made up of discontinuous sands interbedded with shales and are not
expected to produce prolific aquifer	rs. The proposed surface casing should adequately protect any near surface
aquifers.	
<del></del>	
Reviewer: Brad	<u>  Hill                                  </u>
Surface:	
The pre-site investigation of the sur	face was performed on 12/19/05. This site is on State surface, with state
minerals. Jim Davis of SITLA expr	ressed concern that a culvert be installed at the location if needed to protect a
small drainage path Ben Williams	of DWR stated that this site is high value pronghorn habitat, and sage grouse
brood habitat, but made no requests.	
-	
Reviewer: Richard	Powell Date: 12/19/2005

### $\underline{\textbf{Conditions of Approval/Application for Permit to Drill:}}$

1. A synthetic liner with a minimum thickness of 16 mils and a felt subliner shall be properly installed and maintained in the reserve pit.

## ON-SITE PREDRILL EVALUATION Division of Oil, Gas and Mining

OPERATOR: THE HOUSTON EXPLORATION COMPANY

WELL NAME & NUMBER: HACKING RESERVOIR 15-32-8-25

**API NUMBER:** 43-047-37482

LEASE: ML-11124 FIELD/UNIT: WILDCAT

LOCATION: 1/4,1/4 SE/SE Sec: 32 TWP: 8S RNG: 25E 660' FSL 1980' FEL

LEGAL WELL SITING: 460 F SEC. LINE; 460 F 1/4,1/4 LINE; 920 F ANOTHER WELL.

GPS COORD (UTM): 4437400 660140 SURFACE OWNER: STATE.

#### **PARTICIPANTS**

Richard Powell (DOGM), Jim Davis (SITLA), Ben Williams (DWR), Ginger Stringham (Houston Exploration), Cory Stubbs (Dirt Contractor).

#### REGIONAL/LOCAL SETTING & TOPOGRAPHY

Location is set near the top of a small ridge and slopes gently to the northwest. The surrounding area is composed of rolling hills shallow drainages and is for the most part quite flat. Vernal, UT is approximately 36 miles to the northwest.

#### SURFACE USE PLAN

CURRENT SURFACE USE: Livestock and Wildlife Grazing.

PROPOSED SURFACE DISTURBANCE: Location will be 345' by 245'. Proposed new access road to be approximately 1.3 miles. Existing two-track to be upgraded.

LOCATION OF EXISTING WELLS WITHIN A 1-MILE RADIUS: See attached map from GIS database.

LOCATION OF PRODUCTION FACILITIES AND PIPELINES: All production facilities will be on location and added after drilling well. Pipeline will follow access road.

SOURCE OF CONSTRUCTION MATERIAL: All construction material will be borrowed from site during construction of location.

ANCILLARY FACILITIES: None will be required.

WILL DRILLING AT THIS LOCATION GENERATE PUBLIC INTEREST OR CONCERNS? (EXPLAIN): Unlikely.

#### WASTE MANAGEMENT PLAN:

Drilled cuttings will be settled into reserve pit. Liquids from pit will be allowed to evaporate. Formation water will be confined to storage tanks. Portable toilets, sewage holding tanks, and onsite sewage treatment equipment will be handled by commercial contractors and regulated by the appropriate health authority. Trash will be contained

in trash baskets and disposed of at an approved landfill.

#### ENVIRONMENTAL PARAMETERS

AFFECTED FLOODPLAINS AND/OR WETLANDS: none

FLORA/FAUNA: Sagebrush, Rabbit Brush, Shad scale, Prickly Pear, and Cheat grass / Deer, Elk, Rodents, Raptors, Coyote, Rabbit, Bobcat, Pronghorn, Prairie Dog.

SOIL TYPE AND CHARACTERISTICS: Poor light brown silty clay soil, covered with fractured shale.

EROSION/SEDIMENTATION/STABILITY: <u>Very little natural erosion.</u>
Sedimentation and stability are not a problem and location construction shouldn't cause an increase in stability or erosion problems.

PALEONTOLOGICAL POTENTIAL: None observed.

#### RESERVE PIT

CHARACTERISTICS: 150' BY 75' and twelve feet deep.

LINER REQUIREMENTS (Site Ranking Form attached): A liner will be required for reserve pit. Site ranking score is 30.

#### SURFACE RESTORATION/RECLAMATION PLAN:

Will be per SITLA.

SURFACE AGREEMENT: As per SITLA.

CULTURAL RESOURCES/ARCHAEOLOGY: <u>Center stake was marked by "Sagebrush"</u> 11/30/05.

OTHER OBSERVATIONS/COMMENTS

#### **ATTACHMENTS**

Photos of this site were taken and placed on file.

RICHARD POWELL
DOGM REPRESENTATIVE

12/19/05 3:10 PM DATE/TIME

#### Evaluation Ranking Criteria and Ranking Scure For Reserve and Onsite Pit Liner Requirements

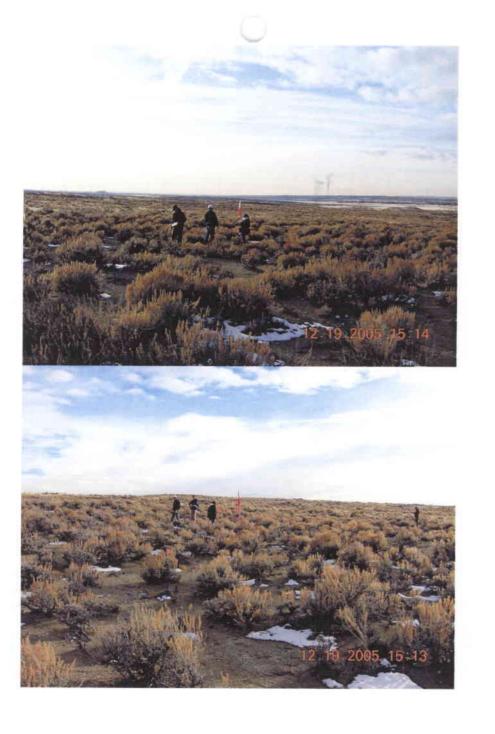
		<del>-</del>
Site-Specific Factors	Ranking	Site Ranking
Distance to Groundwater (feet)		
>200	0	
100 to 200	5	
75 to 100	10	
25 to 75	15	
<25 or recharge area	20	<u>5</u>
-		
Distance to Surf. Water (feet)		
>1000	0	
300 to 1000	2	
200 to 300	10	
100 to 200	15	
< 100	20	0
Distance to Normat Municipal		
Distance to Nearest Municipal Well (feet)		
>5280	0	
1320 to 5280	5	
500 to 1320	10	
<500	20	0
2300	20	<del></del>
Distance to Other Wells (feet)		
>1320	0	
300 to 1320	10	
<300	20	0
		<del>-</del>
Native Soil Type		
Low permeability	0	
Mod. permeability	10	
High permeability	20	
Fluid Type	_	
Air/mist	0	
Fresh Water	5	
TDS >5000 and <10000	10	
TDS >10000 or Oil Base Mud Fluid	15	
containing significant levels of	2.0	5
hazardous constituents	20	
Drill Cuttings		
Normal Rock	0	
Salt or detrimental	10	0
bare or decrimentar		
Annual Precipitation (inches)		
<10	0	
10 to 20	5	
>20	10	0
Affected Populations		
<10	0	
10 to 30	6	
30 to 50	8	_
>50	10	0
Duranta of Manufacture Welling		
Presence of Nearby Utility		
Conduits Not Present	0	
Unknown	10	
Present	15	0
rresent	13	

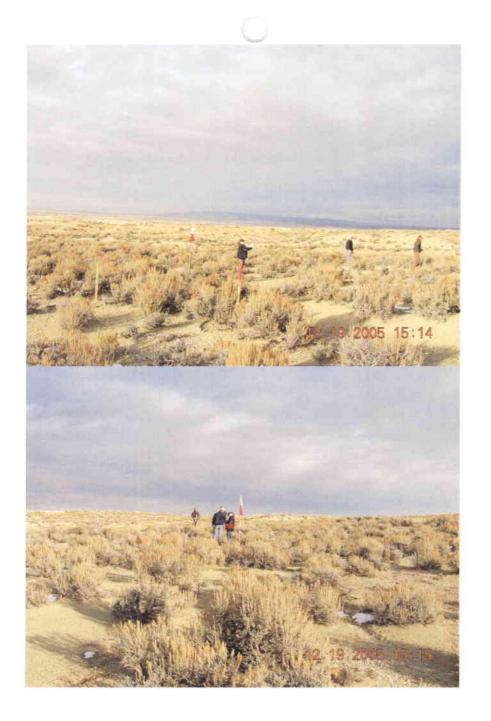
Final Score 30 (Level I Sensitivity)

Sensitivity Level II = 20 or more; total containment is required.

Sensitivity Level II = 15-19; lining is discretionary.

Sensitivity Level III = below 15; no specific lining is required.





#### **STATE ACTIONS**

#### Resource Development Coordinating Committee Governor's Office of Planning and Budget 5110 State Office Building SLC, UT 84114

Phone No. 537-9230

1. State Agency	2. Approximate date project will start:
Oil, Gas and Mining	
1594 West North Temple, Suite 1210	Upon Approval or December 26, 2005
Salt Lake City, UT 84114-5801	
3. Title of proposed action:	
Application for Permit to Drill	
4. Description of Project:	
(wildcat) on a State lease ML-11124, Uintah Co RDCC for consideration of resource issues affect	s to drill the Hacking Reservoir 15-32-8-25 well unty, Utah. This action is being presented to the ting state interests. The Division of Oil, Gas and his action and must issue approval before operations
5. Location and detailed map of land affected (sit	te location map required, electronic GIS map
preferred)	
(include UTM coordinates where possible) (indic	
660' FSL 1980' FEL, SW	· ·
	inge 25 East, Uintah County, Utah
6. Possible significant impacts likely to occur:	andreas displacement of the A. 1.111.
·	urface disturbance during the drilling and completion
	and gas in commercial quantities is discovered, the
	nce of between one and two acres – not including
reclaimed.	or gas is discovered, the location will be completely
7. Identify local government affected a. Has the government been contacted? No.	
b. When?	
c. What was the response?	
d. If no response, how is the local government	t(s) likaly to be imposted?
d. If no response, now is the local government	u(s) likely to be impacted?
8. For acquisitions of land or interests in land by representative and state senator for the project a representative, state senator near project site, if a	rea. Name and phone number of state
a. Has the representative and senator been con	
9. Areawide clearinghouse(s) receiving state action	on: (to be sent out by agency in block 1)

Diana Whitney

Gil Hunt, Associate Director

Phone: (801) 538-5312

Date: December 12, 2005

11. Signature and title of authorized officer

Uintah Basin Association of Governments

10. For further information, contact:

Project Number: <u>6021</u> Sponsor: Division of Oil, Gas and Mining SLB&M: Sec. 32, T8S, R25E Counties Affected: Iron, Uintah

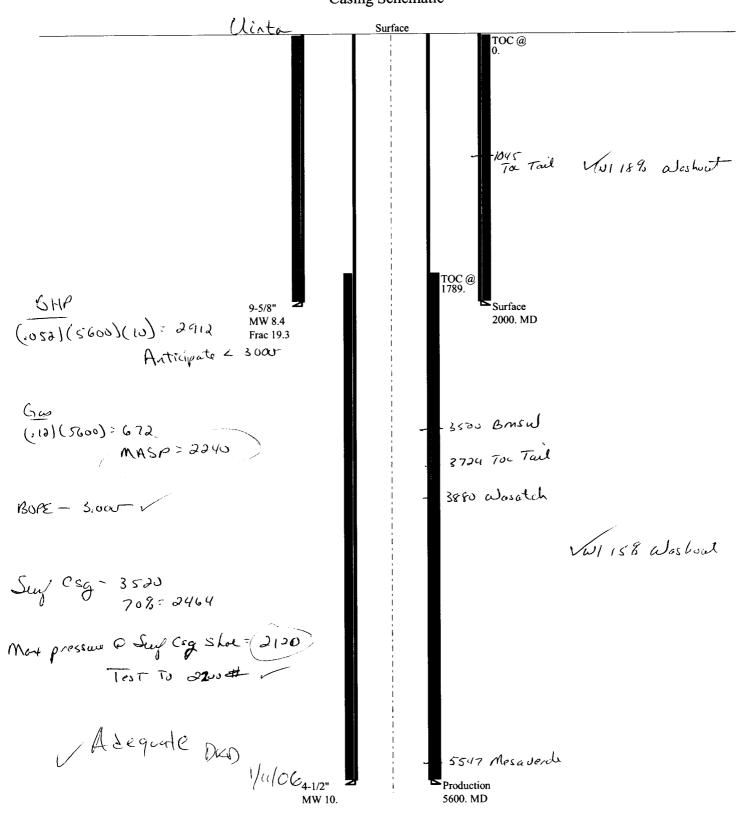
Description: Application for Permit to Drill - proposal to drill a wildcat well

#### Comments:

Well must be drilled and managed to to prevent degradation of water quality through measures to limit erosion, limit stormwater runoff, and limit pollutant loading to stormwater runoff.

- 1- Wellpad placement or expansion disturbs soils. Vegetative and/or structural measures to control erosion should be implemented within 60 days of initial soil disturbance to prevent erosion leaving the site from exceeding the tolerable rate as determined by the local office of USDA/NRCS.
- 2- If vegetation surrounding the wellpad does not provide at least 60% ground cover within 60 days of creating the wellpad, engineering practices should be implemented within those 60 days to control erosion. Such engineering measures may include mulching, use of fiber mats, cross slope trenching, contour furrows, rock dams, terracing or such other erosion control practices as are required to prevent erosion from exceeding the tolerable rate.
- 3- No disturbance or degradation to or of surrounding or nearby soils, native or beneficial vegetation, or riparian areas should be permitted.
- 4- In addition, no spills nor runoff of chemicals including hydrocarbons, lubricants, salt water, antifreeze, or other potentially damaging materials should be permitted.

## 0. J6 Houston Hacking Reservo. 15-32-8-25 Casing Schematic



Well name: 01-06 Houston Hacking Reservoir 15-32-8-25

Operator: Houston Exploration Company

String type: Surface Project ID:

Location: Uintah County

43-047-37482

Design parameters:

Collapse
Mud weight: 8.400 ppg
Design is based on evacuated pipe.

Minimum design factors: Environment: Collapse: H2S considered?

Collapse:H2S considered?NoDesign factor1.125Surface temperature:65 °FBottom hole temperature:93 °FTemperature gradient:1.40 °F/100ft

Minimum section length: 250 ft

**Burst:** 

Design factor 1.00

Cement top:

Surface

<u>Burst</u>

Max anticipated surface

pressure: 1,760 psi Internal gradient: 0.120 psi/ft Calculated BHP 2,000 psi

No backup mud specified.

Tension:

8 Round STC: 1.80 (J) 8 Round LTC: 1.80 (J) Buttress: 1.60 (J) Premium: 1.50 (J)

Body yield: 1.50 (B)

Tension is based on buoyed weight. Neutral point: 1,751 ft Re subsequent strings:

Non-directional string.

Next setting depth: 5,600 ft
Next mud weight: 10.000 ppg
Next setting BHP: 2,909 psi

Fracture mud wt: 19.250 ppg Fracture depth: 2,000 ft Injection pressure 2,000 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft³)
1	2000	9.625	36.00	J-55	ST&C	2000	2000	8.796	142.4
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor
1	873	2020	2.315	2000	3520	1.76	63	394	6.25 J

Prepared Clinton Dworshak by: Utah Div. of Oil & Mining Phone: 801-538-5280 FAX: 810-359-3940

Date: January 10,2006 Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 2000 ft, a mud weight of 8.4 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Well name: 01-06 Houston Hacking Reservoir 15-32-8-25

Operator: Houston Exploration Company

String type: Production Project ID:

Location: Uintah County

43-047-37482

Danium -----

Design parameters: Minimum design factors: Environment:

CollapseCollapse:H2S considered?NoMud weight:10.000 ppgDesign factor1.125Surface temperature:65 °FDesign is based on evacuated pipe.Bottom hole temperature:143 °F

Design is based on evacuated pipe.

Bottom hole temperature: 143 °F
Temperature gradient: 1.40 °F/100ft

Minimum section length: 1,500 ft

Burst:

Design factor 1.00 Cement top: 1,788 ft

Max anticipated surface

pressure: 2,237 psi
Internal gradient: 0.120 psi/ft <u>Tension:</u> Non-directional string.

Calculated BHP 2,909 psi 8 Round STC: 1.80 (J) 8 Round LTC: 1.80 (J)

No backup mud specified.

Buttress: 1.60 (J)

Premium: 1.50 (J)

Body yield: 1.50 (B)

Tension is based on buoyed weight.

Neutral point: 4,763 ft

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft³)
1	5600	4.5	11.60	N-80	LT&C	5600	5600	3.875	129.8
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor
1	2909	6350	2.183	2909	7780	2.67	55	223	4.04

Prepared Clinton Dworshak by: Utah Div. of Oil & Mining Phone: 801-538-5280 FAX: 810-359-3940

Date: January 10,2006 Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 5600 ft, a mud weight of 10 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Engineering responsibility for use of this design will be that of the purchaser.

**MEMORANDUM** 

THEC le obl

DATE:

December 20, 2005

TO:

Utah Division of Oil, Gas and Mining

CC:

Resource Development Coordinating Committee

FROM:

Utah Geological Survey Ground Water & Paleontology Program

SUBJECT:

UGS comments on RDCC short turn around items 6018, 6019, 6020,

6021, 6022, 6025, 6027, and 6028.

6018. Division of Oil, Gas and Mining

Short Turn Around Drilling Permit

Sec. 32, T8S, R25E, Uintah County

Application for Permit to Drill - proposal to drill a wildcat well the Hacking Reservoir 11-32-8-25 on a State lease ML-11124

Although there are no paleontological localities recorded in our files for this project area, the Eocene Uinta Formation that is exposed here has the potential for yielding significant vertebrate fossil localities. The office of the State Paleontologist therefore recommends that a paleontological evaluation be conducted for this project.

6019. Division of Oil, Gas and Mining

Short Turn Around Drilling Permit

Sec. 32, T8S, R25E, Uintah County

Application for Permit to Drill - proposal to drill a wildcat well the Hacking Reservoir 3-32-8-25 on a State lease ML-11124

Although there are no paleontological localities recorded in our files for this project area, the Eocene Uinta Formation that is exposed here has the potential for yielding significant vertebrate fossil localities. The office of the State Paleontologist therefore recommends that a paleontological evaluation be conducted for this project.

6020. Division of Oil, Gas and Mining

Short Turn Around Drilling Permit

Sec. 32, T8S, R25E, Uintah County

Application for Permit to Drill - proposal to drill a wildcat well the Hacking Reservoir 5-

#### 32-8-25 on a State lease ML-11124

Although there are no paleontological localities recorded in our files for this project area, the Eocene Uinta Formation that is exposed here has the potential for yielding significant vertebrate fossil localities. The office of the State Paleontologist therefore recommends that a paleontological evaluation be conducted for this project.

6021. Division of Oil, Gas and Mining
Short Turn Around Drilling Permit
Sec. 32, T8S, R25E, Uintah County
Application for Permit to Drill - proposal to drill a wildcat well the Hacking Reservoir 1532-8-25 on a State lease ML-11124

Although there are no paleontological localities recorded in our files for this project area, the Eocene Uinta Formation that is exposed here has the potential for yielding significant vertebrate fossil localities. The office of the State Paleontologist therefore recommends that a paleontological evaluation be conducted for this project.

6022. Division of Oil, Gas and Mining
Short Turn Around Drilling Permit
Sec. 32, T8S, R25E, Uintah County
Application for Permit to Drill - proposal to drill a wildcat well the Hacking Reservoir 932-8-25 on a State lease ML-11124

Although there are no paleontological localities recorded in our files for this project area, the Eocene Uinta Formation that is exposed here has the potential for yielding significant vertebrate fossil localities. The office of the State Paleontologist therefore recommends that a paleontological evaluation be conducted for this project.

6025. Division of Oil, Gas and Mining
Short Turn Around Drilling Permit
Sec. 8, T29S, R24E, San Juan County
Application for Permit to Drill - proposal to drill a wildcat well the NW Bullhorn 8-31 on a Fee lease Fee

Although there are no paleontological localities recorded in our files for this project area, the Early Cretaceous Burro Canyon that is exposed here has the potential for yielding significant vertebrate fossil localities. The office of the State Paleontologist therefore recommends that a paleontological evaluation be conducted for this project.

6027. Division of Oil, Gas and Mining

Short Turn Around Drilling Permit
Sec. 2, T6S, R21E, Uintah County
Application for Permit to Drill - proposal to drill a wildcat well the North Horseshoe 13-2-6-21 on a State lease ML-47549

Although there are no paleontological localities recorded in our files for this project area, the Eocene Duchesne River Formation that is exposed here has the potential for yielding significant vertebrate fossil localities. The office of the State Paleontologist therefore recommends that a paleontological evaluation be conducted for this project.

6028. Division of Oil, Gas and Mining
Short Turn Around Drilling Permit
Sec. 2, T6S, R21E, Uintah County
Application for Permit to Drill - proposal to drill a wildcat well the North Horseshoe 15-2-6-21 on a State lease ML-47549

Although there are no paleontological localities recorded in our files for this project area, the Eocene Duchesne River Formation that is exposed here has the potential for yielding significant vertebrate fossil localities. The office of the State Paleontologist therefore recommends that a paleontological evaluation be conducted for this project.

From:

Robert Clark Whitney, Diana

To: Date:

12/20/2005 4:08:49 PM

Subject:

RDCC comments

The following comments on RDCC #6018 - 6028 are being sent directly to DOG&M due to their short turn around times.

RDCC #6018 - 6022, #6027, & #6028, comments begin: The proposed Houston Exploration well drilling projects in Uintah County may require permits, known as Approval Orders, from the Utah Division of Air Quality if any compressor stations are constructed at the sites. A permit application, known as a Notice of Intent (NOI), should be submitted to the Executive Secretary at the Utah Division of Air Quality at 150 N. 1950 West, SLC, UT, 84116 for review according to the Utah Air Quality Rule R307-401. Permit: Notice of Intent and Approval Order. The proposed projects are also subject to Utah Air Quality Rule R307-205-3, Fugitive Dust, due to the fugitive dust that is generated during the excavating phases of the projects. These rules apply to construction activities that disturb an area greater than 1/4 acre in size. A permit, known as an Approval Order, is not required from the Division of Air Quality, but steps need to be taken to minimize fugitive dust, such as, watering and/or chemical stabilization, providing vegetative or synthetic cover and windbreaks. A copy of the rules may be found at www.rules.utah.gov/publicat/code/r307/r307.htm. Comments end.

RDCC #6023, #6025, & #6026, comments begin: The proposed Cabot Oil and Gas well drilling projects in San Juan County may require permits, known as Approval Orders, from the Utah Division of Air Quality if any compressor stations are constructed at the sites. A permit application, known as a Notice of Intent (NOI), should be submitted to the Executive Secretary at the Utah Division of Air Quality at 150 N. 1950 West, SLC, UT, 84116 for review according to the Utah Air Quality Rule R307-401. Permit: Notice of Intent and Approval Order. The proposed projects are also subject to Utah Air Quality Rule R307-205-3, Fugitive Dust, due to the fugitive dust that is generated during the excavating phases of the projects. These rules apply to construction activities that disturb an area greater than 1/4 acre in size. A permit, known as an Approval Order, is not required from the Division of Air Quality, but steps need to be taken to minimize fugitive dust, such as, watering and/or chemical stabilization, providing vegetative or synthetic cover and windbreaks. A copy of the rules may be found at www.rules.utah.gov/publicat/code/r307/r307.htm. Comments end.

RDCC #6024, comments begin: The proposed Delta Petroleum well drilling project in Grand County may require a permit, known as Approval Order, from the Utah Division of Air Quality if any compressor stations are constructed at the site. A permit application, known as a Notice of Intent (NOI), should be submitted to the Executive Secretary at the Utah Division of Air Quality at 150 N. 1950 West, SLC, UT, 84116 for review according to the Utah Air Quality Rule R307-401. Permit: Notice of Intent and Approval Order. The proposed project is also subject to Utah Air Quality Rule R307-205-3, Fugitive Dust, due to the fugitive dust that is generated during the excavating phases of the project. These rules apply to construction activities that disturb an area greater than 1/4 acre in size. A permit, known as an Approval Order, is not required from the Division of Air Quality, but steps need to be taken to minimize fugitive dust, such as, watering and/or chemical stabilization, providing vegetative or synthetic cover and windbreaks. A copy of the rules may be found at www.rules.utah.gov/publicat/code/r307/r307.htm. Comments end.

Robert Clark Utah Division of Air Quality 536-4435

CC:

Mcneill, Dave; Wright, Carolyn



# State of Utah

School and Institutional
TRUST LANDS ADMINISTRATION

Jon M. Huntsman, Jr. Governor Kevin S. Carter 675 East 500 South, Suite 500 Salt Lake City, Utah 84102-2818 801-538-5100 801-355-0922 (Fax) http://www.trustlands.com

December 22, 2005

United States Department of the Interior Bureau of Land Management – Vernal District ATTENTION: Mr. Bill Stringer, District Manager 170 South 500 East Vernal, UT 84078

RE:

ML 11124

32-8S-25E, SLM Uintah County, UT

Dear Mr. Stringer:

The captioned oil and gas lease is one of several that were exchanged with the BLM in the "Syntana Exchange" in 1983, but administration of the lease and revenues have continued to flow to School and Institutional Trust Lands Administration ("TLA") because of a settlement from a court case between the BLM and SITLA in 1999. The caveat from the settlement, however, is that until the lease expires, should any new surface disturbing activities occur on the leased lands, TLA, through the Utah Division of Oil, Gas and Mining ("UDOGM"), will notify the Vernal office of the BLM to coordinate the protection of surface resources.

Please be advised, that TLA has recently been informed that the following APDs have been filed on the lands with UDOGM by The Houston Companies:

Hacking Reservoir 11-32-8-25, NESW 32-8S-25E Hacking Reservoir 3-32-8-25, NENW 32-8S-25E Hacking Reservoir 5-32-8-25, SWNW 32-8S-25E Hacking Reservoir 15-32-8-25, SWSE 32-8S-25E Hacking Reservoir 9-32-8-25, NESE 32-8S-25E

Houston's local representative in Vernal is Mr. Bill Ryan at Rocky Mountain Consulting. TLA and UDOGM would appreciate it if you would coordinate any surface requirements pursuant to the settlement agreement with Mr. Ryan or Houston's designee if someone other than Mr. Ryan. Since this lease has not yet expired, TLA assumes that the wells will be permitted by UDOGM in their normal course of business and, should all paperwork be in order, will be approved within the next 30-45 days. Because this is an unusual situation, TLA and UDOGM will both appreciate being kept informed of the extent and progress of completion on any special surface requirements the BLM will make.

Mr. Bill Stringer ML 11124 December 22, 2005 Page Two

Information to the state agencies should be addressed as follows:

TLA

ATTENTION: Ms. LaVonne J. Garrison

675 East 500 South, Suite 500 Salt Lake City, UT 84102

801/538-5197

**UDOGM** 

ATTENTION: Mr. Gil Hunt

P.O. Box 145801

Salt Lake City, UT 84114

801/538-5297

Yours very truly,

SCHOOL AND INSTITUTIONAL TRUST LANDS ADMINISTRATION

UTAH DIVISION OF OIL, GAS & MINING

LaVonne J. Garrison

Assistant Director/Oil & Gas

Git L. Hunt

Associate Director/Oil & Gas

Cc:

Mr. Steve Houston, The Houston Companies

Mr. Bill Ryan, Rocky Mtn Consulting Mr. John Baza, Director, UDOGM

Mr. Ed Bonner, TLA



#### State of Utah

### Department of Natural Resources

MICHAEL R. STYLER Executive Director

Division of Oil, Gas & Mining

JOHN R. BAZA Division Director JON M. HUNTSMAN, JR. Governor

GARY R. HERBERT Lieutenant Governor

January 12, 2006

Houston Exploration Company 1100 Louisiana, Suite 2000 Houston, TX 77002

Re:

Hacking Reservoir 15-32-8-25 Well, 660' FSL, 1980' FEL, SW SE, Sec. 32,

T. 8 South, R. 25 East, Uintah County, Utah

#### Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann.§ 40-6-1 et seq., Utah Administrative Code R649-3-1 et seq., and the attached Conditions of Approval, approval to drill the referenced well is granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-047-37482.

Sincerely,

Gil Hunt

Associate Director

pab

**Enclosures** 

cc: Uintah

Uintah County Assessor

**SITLA** 

Bureau of Land Management, Vernal District Office

Operator:	Houston Exploration Company	
Well Name & Number	Hacking Reservoir 15-32-8-25	
API Number:	43-047-37482	
Lease:	ML-11124	
-		

**Conditions of Approval** 

Sec. 32

**T.** <u>8 South</u>

**R.** 25 East

#### 1. General

Location: <u>SW SE</u>

Compliance with the requirements of Utah Admin. R. 649-1 *et seq.*, the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

#### 2. Notification Requirements

The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

- 24 hours prior to cementing or testing casing
- 24 hours prior to testing blowout prevention equipment
- 24 hours prior to spudding the well
- within 24 hours of any emergency changes made to the approved drilling program
- prior to commencing operations to plug and abandon the well

The following are Division of Oil, Gas and Mining contacts and their work telephone numbers (please leave a voice mail message if the person is not available to take the call):

- Dan Jarvis at (801) 538-5338
- Carol Daniels at (801) 538-5284 (spud)

#### 3. Reporting Requirements

All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

- 4. Compliance with the State of Utah Antiquities Act forbids disturbance of archeological, historical, or paleontological remains. Should archeological, historical or paleontological remains be encountered during your operations, you are required to immediately suspend all operations and immediately inform the Trust Lands Administration and the Division of State History of the discovery of such remains.
- 5. Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis. (Copy Attached)

Page 2 43-047-37482 January 12, 2006

- 6. This proposed well will be located on a lease that was involved in an exchange with the Bureau of Land Management (BLM) in 1983. A court case that was settled in 1999, between the School and Institutional Trust Lands Administration (TLA) and the BLM, followed the exchange. Notification of the application to drill wells on this lease, in accordance with the court settlement, was given to the Vernal office of BLM by letter from TLA and the Division of Oil, Gas and Mining dated December 20, 2005. The operator is responsible for attaining any applicable surface rights-of-way or other permits from the BLM prior to drilling.
- 7. This proposed well is located in an area for which drilling units (well spacing patterns) have not been established through an order of the Board of Oil, Gas and Mining (the "Board"). In order to avoid the possibility of waste or injury to correlative rights, the operator is requested, once the well has been drilled, completed, and has produced, to analyze geological and engineering data generated therefrom, as well as any similar data from surrounding areas if available. As soon as is practicable after completion of its analysis, and if the analysis suggests an area larger than the quarter-quarter section upon which the well is located is being drained, the operator is requested to seek an appropriate order from the Board establishing drilling and spacing units in conformance with such analysis by filing a Request for Agency Action with the Board.
- 8. Operator shall comply with applicable recommendations resulting from Resource Development Coordinating Committee review. Statements attached.



State of Utah

# Department of Natural Resources

MICHAEL R. STYLER Executive Director

Division of Oil, Gas & Mining

JOHN R. BAZA
Division Director

JON M. HUNTSMAN, JR. Governor

GARY R. HERBERT Lieutenant Governor

February 20, 2007

Ginger Stringham
The Houston Exploration Co.
1100 Louisiana, Suite 2000
Houston, TX 77002-6800

Re: <u>APD Rescinded – Hacking Reservoir 15-32-8-25 Sec. 32 T. 8 R. 25E</u> Uintah County, Utah API No. 43-047-37482

Ms. Stringham:

The Application for Permit to Drill (APD) for the subject well was approved by the Division of Oil, Gas and Mining (Division) on January 12, 2006. No drilling activity at this location has been reported to the division. Therefore, approval to drill the well is hereby rescinded, effective February 20, 2007.

A new APD must be filed with this office for approval <u>prior</u> to the commencement of any future work on the subject location.

If any previously unreported operations have been performed on this well location, it is imperative that you notify the Division immediately.

Sincerely,

Diana Mason

**Environmental Scientist** 

cc: Well File

Bureau of Land Management, Vernal

SITLA, Ed Bonner

## Division of Oil, Gas and Mining

COMMENTS:

### **OPERATOR CHANGE WORKSHEET**

1. DJJ 2. CDW

Change of Operator (Well Sold)		X - Operator Merger									
	ged, effecti	ve:			6/1/2007						
FROM: (Old Operator):			TO: ( New Op	erator):							
•			N6965-Forest C	oil Corpora	tion						
			ľ	1 St, Suite							
Houston, TX 77002			Denver, CO 80202								
Phone: 1-(713) 830-6800		Phone: 1 (303) 812-1755									
CA No.			Unit:								
WELL NAME	SEC TW	N RNG		ENTITY	LEASE	WELL	WELL				
		<del></del>		NO	TYPE	TYPE	STATUS				
SEE ATTACHED LIST	<u> </u>					<u> </u>					
OPEDATOD CHANCES DOCUMENT	ATION										
	ATION										
	as received	from the	FORMER open	rator on:	7/30/2007						
, , , , , , , , , , , , , , , , , , , ,					7/30/2007	-					
					s Database of	- n:	7/31/2007				
			Business Numb		571171-0143						
• •						-					
•			IN PLACE								
				•							
-			YES	•							
				, merger na	me change.						
6. Federal and Indian Lease Wells: The BLM and or the BIA has approved the merger, name change, or operator change for all wells listed on Federal or Indian leases on:  BLM not yet BIA											
<u>-</u>	ai oi maiai	i icases (	<b>741.</b>				-				
	r of unit on	erator fo	r wells listed on:		n/a						
8. Federal and Indian Communization Ag	reements	("CA"	<b>'):</b>			<del></del>					
					n/a	_					
		The D	ivision has appro	oved UIC F	orm 5, Trans	fer of Au	thority to				
		or the w	ater disposal wel	l(s) listed of	on:	n/a	_				
DATA ENTRY:											
1. Changes entered in the Oil and Gas Database	on:		7/31/2007	-							
2. Changes have been entered on the Monthly O	perator Cl	ange Sp	oread Sheet on:		7/31/2007	-					
			7/31/2007								
			7/31/2007	-							
The operator of the well(s) listed below has changed, effective ROM: (Old Operator): 2525 - The Houston Exploration Company 1100 Louisiana, Suite 2000 Houston, TX 77002 2000: 1-(713) 830-6800  CA No.  ELL NAME  SEC TWN  EE ATTACHED LIST  PERATOR CHANGES DOCUMENTATION Anter date after each listed item is completed (R649-8-10) Sundry or legal documentation was received for the new company was checked on the Department of Corr.  Is the new operator registered in the State of Utah:  If NO, the operator was contacted contacted on: (R649-9-2)Waste Management Plan has been received on: Inspections of LA PA state/fee well sites complete on: Reports current for Production/Disposition & Sundries on: Federal and Indian Lease Wells: The BLM and or the or operator change for all wells listed on Federal or Indian Federal and Indian Communization Agreements of the BLM or BIA has approved the successor of unit operator BLM or BIA has approved the operator for all wells Underground Injection Control ("UIC") Inject, for the enhanced/secondary recovery unit/project for ATA ENTRY:  Changes entered in the Oil and Gas Database on: Changes have been entered on the Monthly Operator Change of Acceptance of Drilling Procedures for APD/New OND VERIFICATION: Federal well(s) covered by Bond Number: Indian well(s) covered by Bond Number: Indian well(s) covered by Bond Number:		937 On:	n/a	pending							
	o. Receipt of Accorptance of Samming a secondary										
			6236351								
			n/a	-							
3a. (R649-3-1) The NEW operator of any fee well(s) listed covered by Bond Number 6218963											
•				not yet	_	_					
op		•			_						
LEASE INTEREST OWNER NOTIFIC	CATION	:									
4. (R649-2-10) The <b>FORMER</b> operator of the fee	wells has	oeen con	tacted and inform	ned by a le	tter from the	Division					
				8/1/2007							

		STATE OF UTAH DEPARTMENT OF NATURAL RESOUR	BCE9	3		FORM 9
	Į.	5. LEASE DESIGNATION AND SERIAL NUMBER: See Attached List				
	SUNDRY	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:				
Dò	not use this form for proposals to drill ne drill horizontal la	ew wells, significantly deepen existing wells below cun sterals. Use APPLICATION FOR PERMIT TO DRILL fo	rent bo	ottom-hole dep r such proposa	th, reenter plugged wells, or to	7. UNIT or CA AGREEMENT NAME:
	YPE OF WELL OIL WELL	WELL NAME and NUMBER:     See Attached List				
	AME OF OPERATOR: Test Oil Corporation	N6965		·		9. API NUMBER: Various
	DDRESS OF OPERATOR: 7 17th Street, #3600	Denver, STATE CO ZIP	802	02	PHONE NUMBER: (303) 812-1755	10. FIELD AND POOL, OR WILDCAT:
4. L	OCATION OF WELL	STATE ZIP			(000)012 1100	
F	DOTAGES AT SURFACE: See at	tached list		***************************************		COUNTY:
Q	TR/QTR, SECTION, TOWNSHIP, RANG	GE, MERIDIAN:	K.			STATE: UTAH
11.	CHECK APPR	ROPRIATE BOXES TO INDICAT	EΝ	ATURE	OF NOTICE, REPO	ORT, OR OTHER DATA
	TYPE OF SUBMISSION			Т	YPE OF ACTION	
	NOTICE OF INTENT	ACIDIZE		DEEPEN		REPERFORATE CURRENT FORMATION
	(Submit in Duplicate)	ALTER CASING		FRACTURE	TREAT	SIDETRACK TO REPAIR WELL
	Approximate date work will start:	CASING REPAIR		NEW CONS	TRUCTION	TEMPORARILY ABANDON
		CHANGE TO PREVIOUS PLANS		OPERATOR	CHANGE	TUBING REPAIR
		CHANGE TUBING		PLUG AND	ABANDON	VENT OR FLARE
<b>√</b>	SUBSEQUENT REPORT	CHANGE WELL NAME	$\overline{\Box}$	PLUG BACK	<	WATER DISPOSAL
	(Submit Original Form Only)	CHANGE WELL STATUS	$\overline{\Box}$	PRODUCTION	ON (START/RESUME)	WATER SHUT-OFF
	Date of work completion:	COMMINGLE PRODUCING FORMATIONS	$\Box$		ION OF WELL SITE	✓ other: Change of Operator
		CONVERT WELL TYPE			TE - DIFFERENT FORMATION	V Ones. Onlarge of Operator
		DMPLETED OPERATIONS. Clearly show all put change the operator for the attactions.				1019010
		poration (N-6965). Forest merged ne contract operated wells will con			•	
		new operator, accepts all applical ucted on the lease or portion of the				s and restrictions concerning
Fo	rest Oil Corporation mee	ets the State of Utah bonding req	juire	ments u	nder Safeco bond #	6218963.
Ple	ease send all future corre	espondence to Forest Oil Corpor	atio	n at the a	above listed address	3.
Fo	rest Oil Corporation, 707	7 17th Street, Suite #3600, Denv	er, C	CO 8020	2	
J. /	GU Jlru Z. Ridens, Senior Vice F	President - Western Region				5-07 Date
NAM	E (PLEASE PRINT) Joanne C.	Hresko		TITL	Vice President &	General Mgr Northern Division
SIGN	IATURE Dann	e C. Thishis		DAT	7-5.07	

(This space for State use only)

11.

APPROVED 7/31/07 Carlese Russell

No wells in APD status or at this time RECEN

RECEIVED

JUL 3 U 2007

(5/2000)

Division of Oil, Gas and Mining Earlene Russell, Engineering Technician

wmp

well name	sec	twp	rng	api	entity	lease	well	stat	flag	unit	qtr_qtr	1 num	op no
FEDERAL 28-01	28	080S		4304730098			GW				SESE	UTU-016257	
CONOCO STATE 32-2	32	080S	L	4304730100	10096		GW	<u>:</u>			NENE	ML-11124	N2525
ROCK HOUSE 11-31	31	100S	230E	4304733312	13984	Federal	GW	P			NESW	UTU-76281	N2525
BONANZA 4B-12	12	090S	230E	4304733806	<del></del>	Federal	D	PA	-		NWNW	UTU-74426	N2525
WALKER HOLLOW 13-31	31	060S	230E	4304735039		Federal	GW	LA			SESW	UTU-76280	N2525
ROCK HOUSE 6D-32	32	100S	230E	4304735409	14293	State	GW	S			SENW	ML-47063	N2525
BONANZA 2B-16	16	090S	240E	4304735694	14186	State	D	PA			NWNE	ML-46526	N2525
ROCK HOUSE 2D-36	36	100S	220E	4304735759	14357	State	GW	P			NWNE	ML-47061	N2525
ROCK HOUSE 2D-32	32	100S	230E	4304735760	14317	State	GW	S			NWNE	ML-47063	N2525
ROCK HOUSE 10D-32	32	100S	230E	4304735761	14318	State	GW	S			NWSE	ML-47063	N2525
ROCK HOUSE 12D-32	32	100S	230E	4304735762	14294	State	GW	P	1		NWSW	ML-47063	N2525
ROCK HOUSE 11-36	36	100S	220E	4304735900	14478	State	GW	P			NESW	ML-46907	N2525
ROCK HOUSE 4-36	36	100S	220E	4304735901	14449	State	GW	S			NWNW	ML42061	N2525
BONANZA 12A-22	22	090S	240E	4304735922	14520	Federal	D	PA			NWSW	UTU-78118	N2525
BONANZA 14-16	16	090S	240E	4304735941	14521	State	D	PA			SESW	ML-46526	N2525
ROCK HOUSE 11-2	02	110S	230E	4304736153	14695	State	GW	P	С		NESW	ML-47078	N2525
ROCK HOUSE 7-32-10-23	32	100S	230E	4304736306	14766	State	GW	S			SWNE	ML-47063	N2525
ROCK HOUSE 3-32-10-23	32	100S	230E	4304736307	14781	State	GW	P			NENW	ML-47063	N2525
ROCK HOUSE 5-32-10-23	32	100S	230E	4304736410	14727	State	GW	S			SWNW	ML-47063	N2525
GUSHER 6-2	02	060S	190E	4304736963		State	OW	LA			SENW	ML-49144	N2525
N HORSESHOE 3-16-6-21	16	060S	210E	4304737391	15716	State	GW	DRL	C		NENW	ML-49317	N2525
N HORSESHOE 12-7-6-22	07	060S	220E	4304737392		State	GW	LA			NWSW	ML-47969	N2525
N HORSESHOE 16-9-6-22	09	060S	220E	4304737393		State	GW	LA			SESE	ML-47969	N2525
N HORSESHOE 14-10-6-22	10	060S	220E	4304737394		State	GW	LA			SESW	ML-47969	N2525
N HORSESHOE 2-15-6-22	15	060S	220E	4304737395		State	GW	LA			NWNE	ML-47969	N2525
N HORSESHOE 4-15-6-22	15	060S	220E	4304737396		State	GW	LA			NWNW	ML-47969	N2525
N WALKER HOLLOW 12-32-6-23	32	060S	230E	4304737397		State	GW	LA			NWSW	ML-47777	N2525
N WALKER HOLLOW 16-32-6-23	32	060S	230E	4304737398		State	GW	LA			SESE	ML-47777	N2525
N WALKER HOLLOW 2-32-6-23	32	060S	230E	4304737399	15741	State	GW	DRL	C		NWNE	MIL-47777	N2525
N WALKER HOLLOW 10-32-6-23	32	060S	230E	4304737400		State	GW	LA			NWSE	ML-47777	N2525
N WALKER HOLLOW 8-32-6-23	32	060S	230E	4304737401		State	GW	LA			SENE	ML-47777	N2525
N WALKER HOLLOW 11-36-6-23	36	060S	230E	4304737462		State	GW	LA			NESW	ML-47970	N2525
N WALKER HOLLOW 13-36-6-23	36	060S	230E	4304737463		State	GW	LA			SWSW	ML-47970	N2525
N WALKER HOLLOW 15-36-6-23	36	060S	230E	4304737464		State	GW	LA			SWSE	ML-47970	N2525
N WALKER HOLLOW 14-32-6-23	32	060S	230E	4304737478		State	GW	LA			SESW	ML-47777	N2525
HACKING RES 11-32-8-25	32			4304737479		State	GW	LA			NESW	ML-11124	N2525
HACKING RES 3-32-8-25	32	080S	250E	4304737480		State	GW	LA			NENW	ML-11124	N2525
HACKING RES 5-32-8-25		080S	250E	4304737481		State	GW	LA			SWNW	ML-11124	N2525
HACKING RES 15-32-8-25			<del> </del>	4304737482		State	GW	+	1		SWSE	ML-11124	N2525
HACKING RES 9-32-8-25	<del></del> -	<del></del>	+	4304737483		State	GW	LA			NESE	ML-11124	N2525
HACKING RESERVOIR 7-32-8-25	32	080S	250E	4304737571	15885	State		DRL	C		SWNE	ML-11124	N2525